HUNTERSVILLE WATER TANK

After being named by Forbes Magazine as the "Second Best Place to Move in America," Huntersville, North Carolina, has been getting noticed. And so has the city's highly visible water tank since it was refurbished with an aesthetically pleasing fluoropolymer exterior finish from Tnemec. "The tank went from an eyesore sitting in the middle of an upscale area, to an eye-catching baby blue landmark on the horizon," Tnemec coating consultant Nick Vause observed. "The owner was especially attracted to the superior performance of the finish coating."

The tank's owner, Charlotte-Mecklenburg Utilities (CMUD), had experienced some coating issues with two previous elevated tanks, so long-lasting color and gloss retention were key considerations for the Huntersville project. The existing coatings on the 1.5-million-gallon tank contained lead, so full containment was required throughout surface preparation and coating application. "Due to the tank's proximity to a nearby school and parking lots, overspray could have also been an issue without containment," Vause noted.

Interior steel was prepared in accordance with SSPC-SP10/NACE No. 2 Near-White Metal Blast Cleaning, while exterior steel was prepared in accordance with SSPC-SP6/NACE No. 3 Commercial Blast Cleaning. Both the interior and exterior steel was primed with a spray-applied coat of Series 94-H₂O Hydro-Zinc, an aromatic, zinc-rich urethane that provides outstanding long-term corrosion resistance.

Interior steel received two spray-applied coats of Series N140 Pota-Pox Plus, a polyamidoamine epoxy, which is certified in accordance with ANSI/NSF Std. 61 for use in potable water. Exterior steel received a roller-applied intermediate coat of Series 1075 Endura-Shield II, a semi-gloss aliphatic acrylic polyurethane, which is highly resistant to abrasion, wet conditions, and exterior weathering.

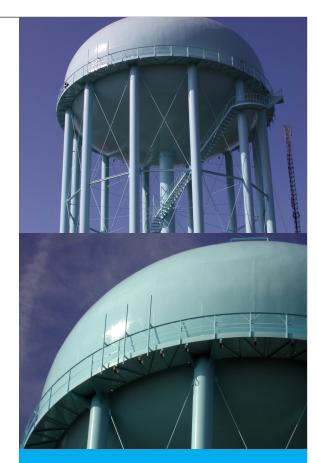
The exterior finish coat of Series 700 HydroFlon, an advanced thermoset fluoropolymer polyurethane, was also roller-applied. With its outstanding resistance to ultraviolet (UV) light degradation, unprecedented long-term gloss and color retention, and excellent resistance to abrasion and chalking, HydroFlon is recommended where extremely long-term maintenance cycles are desired.

"The coating contractor, Utility Service, did an outstanding job on the tank and was awarded a second CMUD tank that was almost identical, but in a different location," Vause added. "And they used the same Tnemec coating system on that second tank."

Water and wastewater treatment service to Mecklenburg County and its incorporated cities in North Carolina is provided by CMUD, which maintains more than 244,000 commercial and residential water connections.

FEATURED PRODUCTS

Series 94-H₂O Hydro-Zinc Series N140 Pota-Pox Plus Series 700 HydroFlon Series 1075 Endura-Shield II



PROJECT INFORMATION

Project LocationHuntersville, North Caroli

Project Completion Date
August 2009

Owner

Charlotte-Mecklenburg Utilities Charlotte, NC

Engineer

64116-3094

Charlotte, NC

Field Applicator

Utility Service Madison, North Carolina

The interior and exterior steel of the Huntersville Water Tank in North Carolina was primed with Series 94-H₂O Hydro-Zinc to protect against corrosion.

